



Revised January 2021

Dealer Service Instructions for:

# Safety Recall V62 / NHTSA 19V-813 Fuel Pump Relay

NOTE: Additional information to section A steps 10 -14 and section B steps 1-5

Remedy Available

2011 - 2013 (WD) Dodge Durango (WK) Jeep® Grand Cherokee

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery. Dealers should also perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

#### **Subject**

The fuel pump relay on about 582,000 of the above vehicles may have had a fuel pump relay installed as a recall remedy that is susceptible to silicon contamination of the relay contacts, that can cause the relay to fail. A fuel pump relay failure can result in a no-start condition or an engine stall condition if the vehicle is running. A vehicle engine stall while driving can cause a vehicle crash without prior warning

#### Repair

Inspect for an external fuel pump relay and replace the fuel pump relay and harness connector and mount relay on bracket near the PCM, if there is no external fuel pump relay modify the TIPM to accept an external relay.

#### **Parts Information**

Part Number Description

CSZDV621AA Part Package

Each package contains the following components:

<b>Quantity</b>	<u>Description</u>
1	Harness, Fuel Pump Relay
1	Relay, Fuel Pump
3	Crimp, Brass
3	Strap, Plastic Tie
3	Tube, Shrink

# Part Number Description CSZDV622AA Part Package

Each package contains the following components:

<b>Quantity</b>	Description
1	Nut
1	Bracket
1	Bolt

Dealers should order the part package for each vehicle at the time appointments are scheduled to assure that the part is available when the customer arrives.

#### **Parts Return**

No parts return required for this campaign.

## **Special Tools**

#### The following special tools are required to perform this repair:

➤ 10042 Wire splice crimp tool

➤ 6680-2PA Pick, Terminal

## **Service Procedure**

## A. Inspect for External Fuel Pump Relay

- 1. Open hood.
- 2. Inspect for an external fuel pump relay (Figure 1):
  - ➤ If there is an external fuel pump relay installed, continue to step 3.
  - ➤ If there is **NO** external fuel pump relay, continue with **Section B. Install External Fuel Pump Relay**.

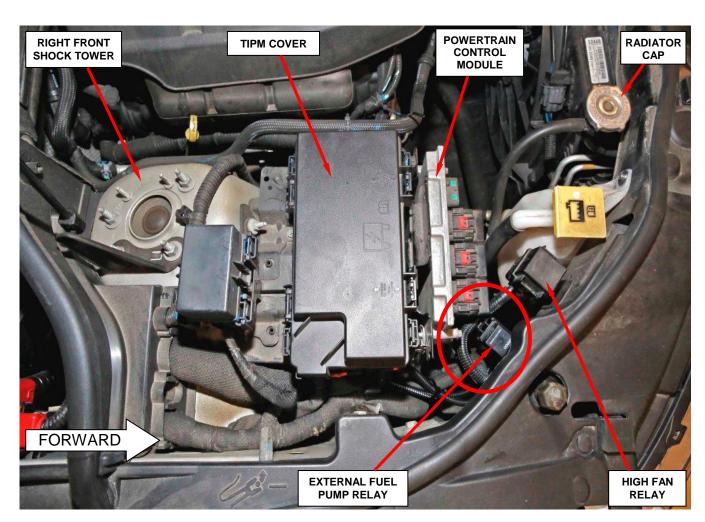


Figure 1 - Inspect for External Fuel Pump Relay

- 3. Position the passenger seat fully forward.
- 4. Open the battery access cover located under the passenger front seat and disconnect the negative battery cable (Figure 2).
- 5. Remove the fuel pump relay from the core support (Figure 1).
- 6. Remove the TIPM cover and remove the B+ terminal retaining nut, cable and the orange 12V relay wire (Figure 3).



Figure 2 – Battery Access

7. Push the four TIPM retaining tabs and separate the TIPM from the TIPM support bracket (Figure 3).



Figure 3 - TIPM Release Tabs

8. Carefully rotate the TIPM on its side to expose the fuel pump relay wire harness connections (Figure 4).

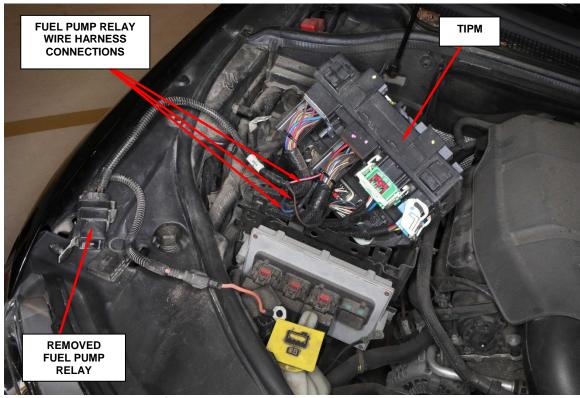


Figure 4 - Fuel Pump Relay Harness

9. Cut the pink, brown and blue wires from the Fuel Pump Relay wire harness assuring to leave sufficient lengths to reconnect all 3 wires and DISCARD the relay and wire harness (Figure 5).

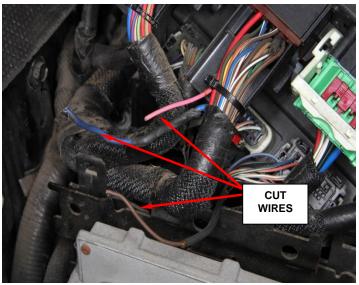


Figure 5 - Fuel Pump Relay Wires

10. Remove the relay housing from the repair package (Figure 6).



Figure 6 - Fuel Pump Relay Repair Kit

11. Lift up on both sides of the fuel relay housing cover tabs and remove the cover from the housing (Figure 7).

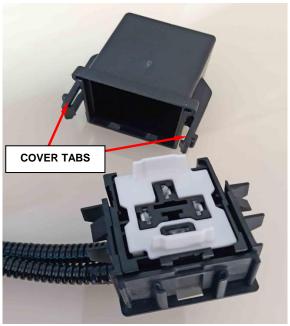


Figure 7 - Fuel Relay Housing

- 12. Align the fuel pump relay male terminals to the female terminals in the electrical housing connector and firmly insert until fully seated into the housing (Figure 8).
- 13. Align the cover keys to the fuel pump relay housing cover assuring the tabs are fully locked (Figure 9 and Figure 10).

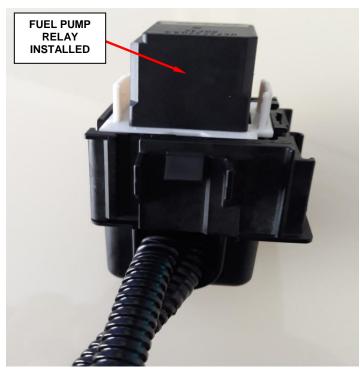


Figure 8 - Fuel Relay Installation

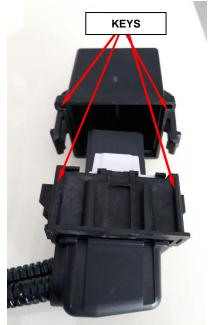


Figure 9 - Cover Guides



Figure 10 - Housing Cover Installed

14. Slide the relay bracket into the relay housing opening assuring it is fully seated (Figure 11).

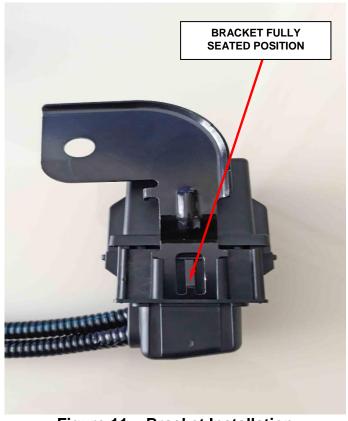


Figure 11 – Bracket Installation

- 15. Strip approximately ½ inch (13 mm) of insulation from the ends of the brown wire, pink wire and blue wire on the **NEW** fuel pump relay wire and the original brown wire, pink wire and blue wire.
- 16. Place a piece of black shrink tube, provided in the repair kit, over the cut brown, blue wire and pink wire (Figure 12).
- 17. Using the supplied brass splice band clamp and crimp tool 10042, crimp the wires on the wire harness side (brown wire, pink wire and blue wire) to the **NEW** fuel pump relay harness (brown wire, pink wire and blue wire) (Figure 12).
- 18. Solder the brass splice band clamp with rosin core solder.

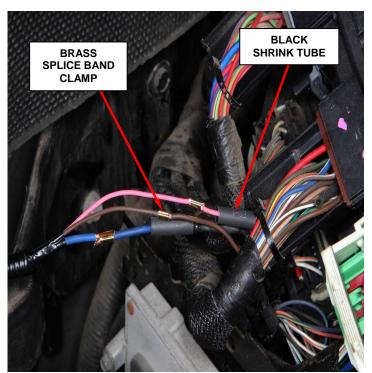


Figure 12 - Splice Clips

19. Slide the shrink tube evenly over the soldered brass splice and apply heat to the shrink tube until glue comes out of both ends of the shrink tube.

20. Route the **NEW** Fuel Pump Relay wiring harness along the main TIPM harness and secure the **NEW** harness using tie straps as shown in (Figure 13).

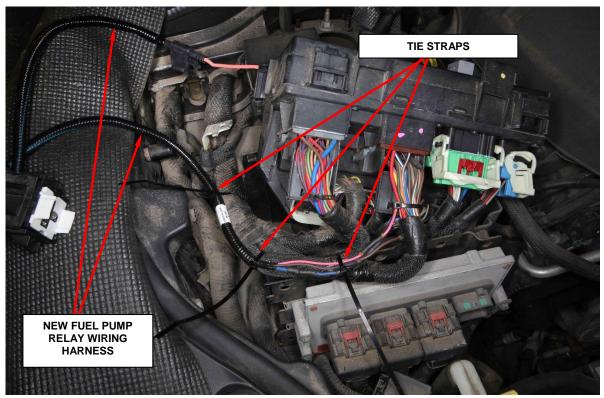


Figure 13 - New Fuel Pump Relay Harness

- 21. Cut off the excess tie strap material.
- 22. Align and install the TIPM in housing assuring all four of the release tabs are fully locked (Figure 14).

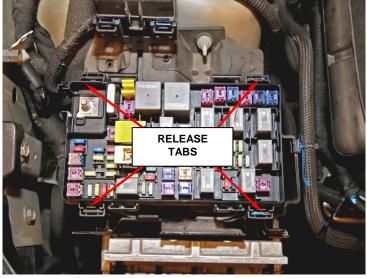


Figure 14 - TIPM Locking Tabs

23. Attached the **NEW** external fuel pump relay bracket on to the back of the existing hole on the PCM mounting bracket and tighten the nut and bolt to 6N·m (53in. lbs.) (Figure 15).

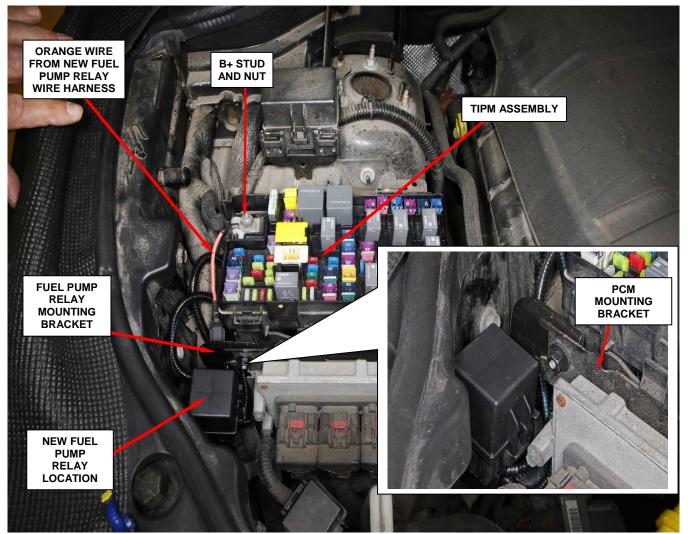


Figure 15 - Fuel Pump Relay Installed

- 24. Connect the original B+ cable terminal to the TIPM B+ stud (Figure 15).
- 25. Connect the wire eyelet on the orange wire of the **NEW** fuel pump relay wire harness to the TIPM B+ stud (Figure 15).
- 26. Install the B+ cable terminal retaining nut and tighten the nut to 19 N⋅m (14 ft. lbs.) (Figure 15).

- 27. Connect the negative battery cable to the negative battery terminal on the battery and close the battery access cover.
- 28. Return the passenger seat to its original location.
- 29. Return the vehicle to the customer.

## **B. Install External Fuel Pump Relay**

1. Remove the relay housing from the repair package (Figure 16).



Figure 16 - Fuel Pump Relay Repair Kit

2. Lift up on both sides of the fuel relay housing cover tabs and remove the cover from the housing (Figure 17).

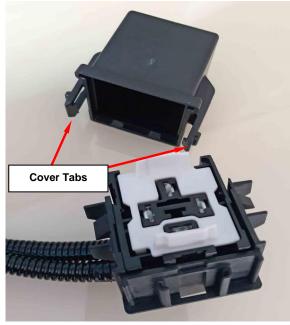


Figure 17 - Fuel Relay Housing

- 3. Align the fuel pump relay male terminals to the female terminals in the electrical housing connector and firmly insert until fully seated into the housing (Figure 18).
- 4. Align the cover keys to the fuel pump relay housing cover assuring the tabs are fully locked (Figure 19 and Figure 20).

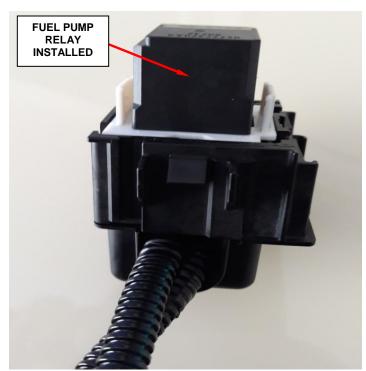


Figure 18 - Fuel Relay Installation

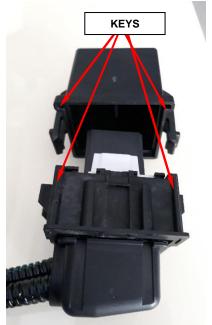


Figure 19 - Cover Guides



Figure 20 - Housing Cover Installed

5. Slide the relay bracket into the relay housing opening assuring it is fully seated (Figure 21).

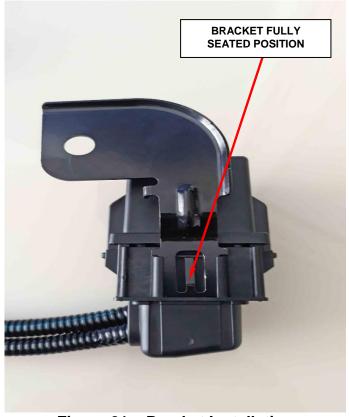


Figure 21 – Bracket Installation

- 6. Position the passenger seat fully forward.
- 7. Open the battery access cover located under the passenger front seat and disconnect the negative battery cable (Figure 22).
- 8. Remove and save the Totally Integrated Power Module (TIPM) access cover.



Figure 22 - Battery Access

- 9. Remove and save the B+ cable terminal retaining nut.
- 10. Carefully separate the B+ cable terminal from the B+ TIPM stud (Figure 23).

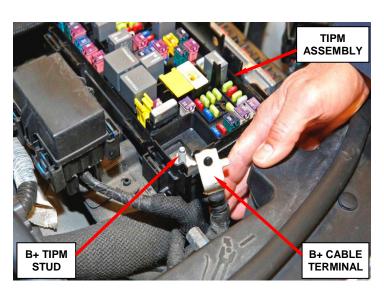


Figure 23 - B+ Cable Terminal

- 11. Push the four TIPM retaining tabs and separate the TIPM from the TIPM support bracket (Figure 24).
- 12. Unplug the 50-way electrical connector from the bottom of the TIPM (Cavity "A") (Figure 25).

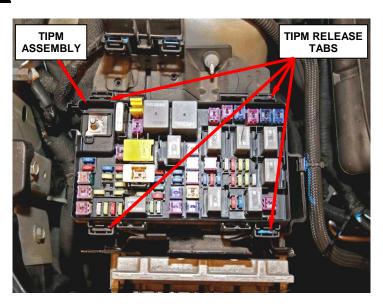


Figure 24 - TIPM Release Tabs

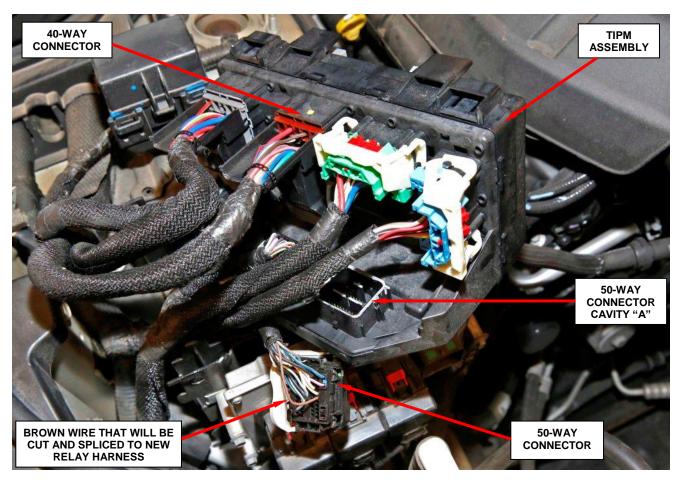


Figure 25 - TIPM 50-Way Electrical Connector

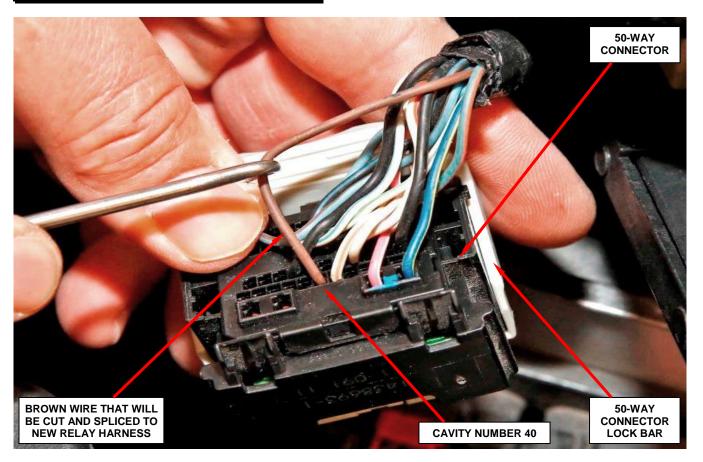


Figure 26 – Locate Brown Wire in 50-Way Connector

13. Locate the brown wire in cavity number 40 of the 50-way electrical connector (Figure 27).

14. Cut the brown wire one inch (25 mm) from the 50-way electrical connector (Figure 27).

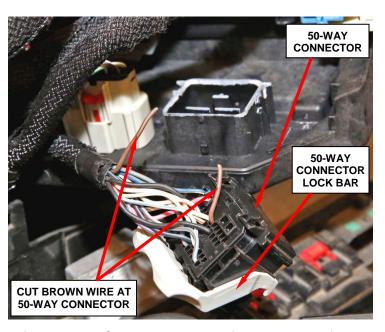


Figure 27 – Cut the Brown Wire One Inch from Connector

- 15. Install shrink tube to the connector side brown wire to insulate the wire end. This wire will no longer be used (Figure 28).
- 16. Using the following procedure, splice the brown wire on the wire harness to the brown wire on the new fuel pump relay harness:
  - a. Strip approximately ½ inch (13 mm) of insulation from the end of the brown wire on the new fuel pump relay wire and the original brown wire.

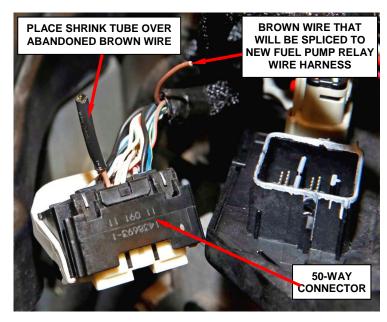


Figure 28 - Insulate Brown Abandoned Wire

- b. Place a piece of black shrink tube, provided in the repair kit, over the cut brown wire.
- c. Using the supplied brass splice band clamp and crimp tool 10042, crimp the brown wire on the wire harness side to the brown wire on the new fuel pump relay harness (Figure 29).
- d. Solder the brass splice band clamp with rosin core solder.
- e. Slide the shrink tube evenly over the soldered brass splice and apply heat to the shrink tube until glue comes out of both ends of the shrink tube.
- 17. Carefully plug the 50-way electrical connector into the bottom of the TIPM.

CAUTION: Be sure that the 50-way connector lock bar is fully engaged.

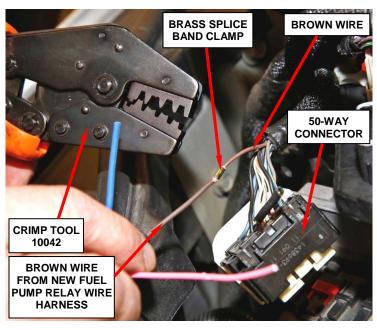


Figure 29 - Crimp and Solder Brown Wires

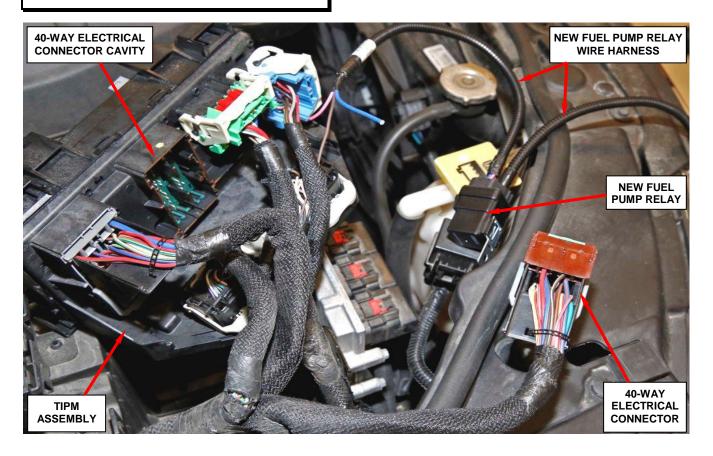


Figure 30 - TIPM 40-Way Electrical Connector

- 18. Unplug the 40-way electrical connector located on the bottom side of the TIPM (Figure 30).
- 19. Carefully remove and save the 40-way electrical connector wire cover located on the wire side of the connector (Figure 31).
  - NOTE: The plastic tie strap that holds the wire harness to the wire cover must be cut off and discarded (Figure 31).

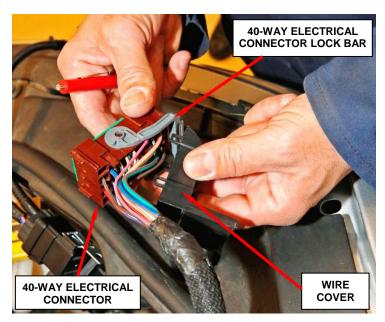


Figure 31 – 40-Way Electrical Connector Wire Cover

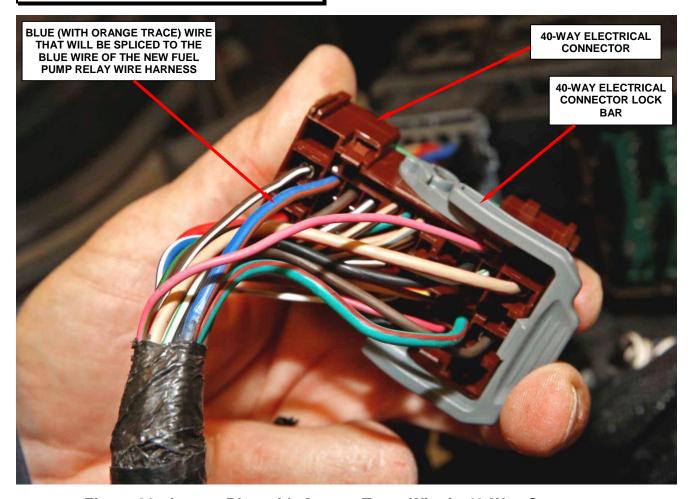


Figure 32 - Locate Blue with Orange Trace Wire in 40-Way Connector

- 20. Locate the blue (with an orange trace) wire in the 40-way electrical connector (Figure 32).
- 21. Cut the blue (with an orange trace) wire one inch (25 mm) from the 40-way electrical connector (Figure 33).
- 22. Install shrink tube to the connector side blue (with an orange trace) wire to insulate the wire end. This wire will no longer be used (Figure 33).

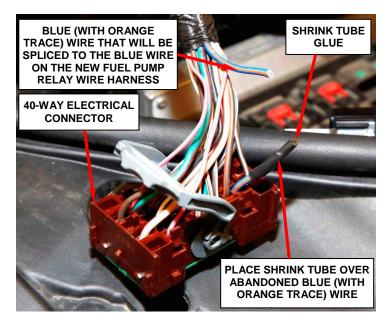


Figure 33 – Cut the Blue (with Orange Trace)
Wire

- 23. Using the following procedure, splice the blue (with an orange trace) wire on the wire harness to the blue wire on the new fuel pump relay harness:
  - a. Strip approximately ½ inch (13 mm) of insulation from the end of the blue wire on the new fuel pump relay wire and the original blue (with an orange trace) wire (Figure 34).
  - b. Place the black shrink tube provided in the repair kit over the cut wire (Figure 34).
  - c. Using the supplied brass splice band clamps and crimp tool 10042, crimp the blue wire (with orange trace) on the wire harness side to the blue wire on the fuel pump relay wire harness (Figure 35).
  - d. Solder the brass splice band clamp with rosin core solder (Figure 35).
  - e. Slide the shrink tube evenly over the soldered brass splice band clamp and apply heat to the shrink tube until glue comes out of both ends of the shrink tube.

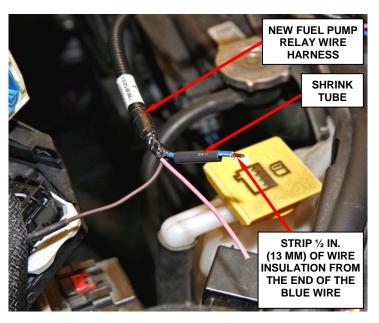


Figure 34 – Strip Wire and Install Shrink Tube

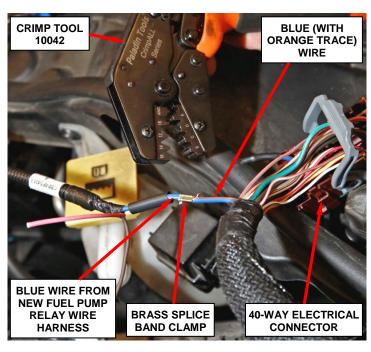


Figure 35 - Crimp and Solder Blue Wire to Blue Wire (with Orange Trace)

24. Remove and save the 40-way electrical connector green plastic terminal lock (Figure 36).

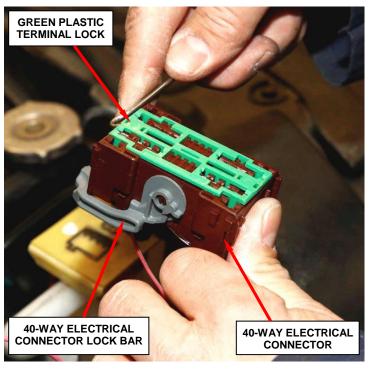


Figure 36 – Green Connector Lock

25. Locate the pink (with green trace) wire in cavity 38 of the 40-way electrical connector (Figure 37).

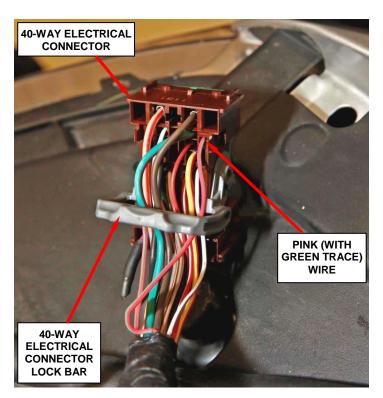


Figure 37 – Pink (with Green Tracer) Wire Location

26. Carefully remove the pink (with a green trace) from the 40-way connector (Figure 38).

NOTE: Use Miller Tool 6680-2PA terminal pick, or equivalent, to remove the wire terminal from the 40-way electrical connector.

27. Strip approximately ½ inch (13 mm) of insulation off the pink (with green trace) wire without cutting the wire (Figure 39).

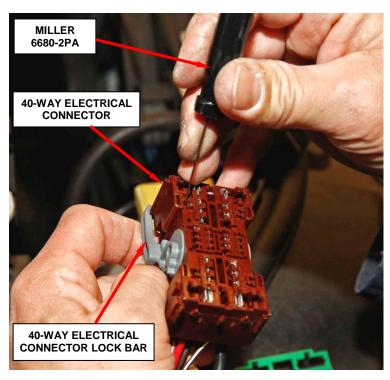


Figure 38 – Remove Pink (with Green Trace) wire from 40-Way Connector

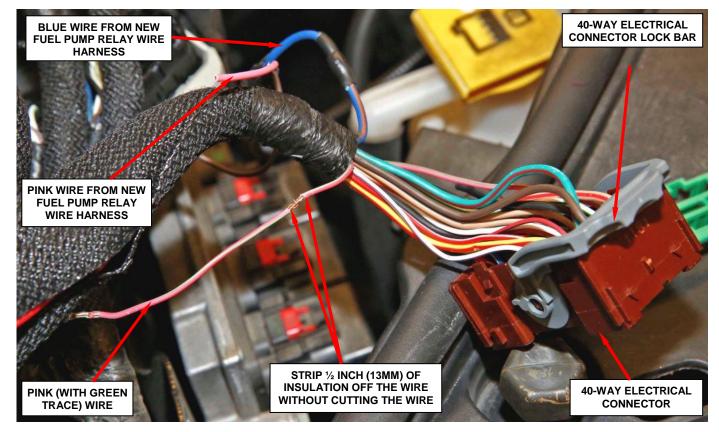


Figure 39 - Remove Insulation without Cutting the Wire

- 28. Using the following procedure, splice the pink (with a green trace) wire to the pink wire on the new fuel pump relay harness:
  - a. Strip approximately ¾ inch (20 mm) of insulation from the end of the pink wire on the new fuel pump relay wire.
  - b. Wrap the pink wire from the new fuel pump relay wire harness around the pink (with green trace) wire at the location the insulation was removed (Figure 40).
  - c. Using the supplied brass splice band clamp and crimp tool 10042, crimp the fuel pump wire harness pink wire to the pink (with a green trace) wire on the vehicle wire harness (Figure 40).
  - d. Solder the brass splice band clamp with rosin core solder.
  - e. Slide the shrink tube evenly over the soldered brass splice band clamp and apply heat to the shrink tube until glue comes out of both ends of the shrink tube (Figure 41).

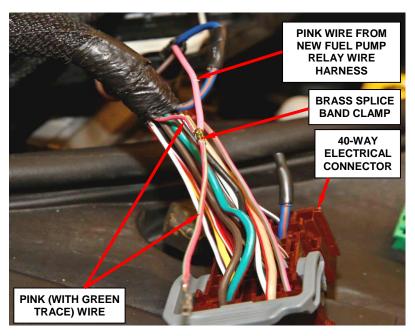


Figure 40 - Crimp and Solder Pink Wire to Pink (with Green Trace) Wire

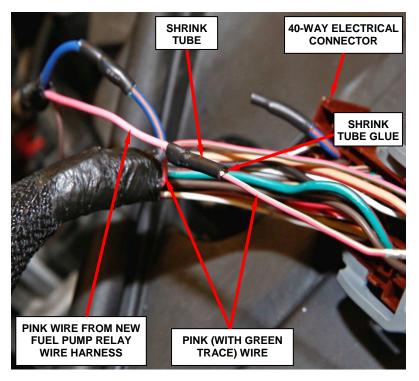


Figure 41 - Install Shrink Tube

- 29. Carefully install the wire terminal for the pink (with green trace) wire back into the same cavity (cavity 38) in the 40-way electrical connector that it was removed from (Figure 42).
- 30. Install the 40-way electrical connector green plastic terminal lock (Figure 42).
- 31. Install the 40-way electrical connector wire cover.
- 32. Install a plastic tie strap to hold the wire harness in place on the back side of the 40-way electrical connector (Figure 43).
- 33. Plug the 40-way electrical connector into the bottom of the TIPM assembly.
  - CAUTION: Be sure the 40-way electrical connector lock bar is fully engaged.
- 34. Snap the TIPM assembly back into the TIPM support bracket.

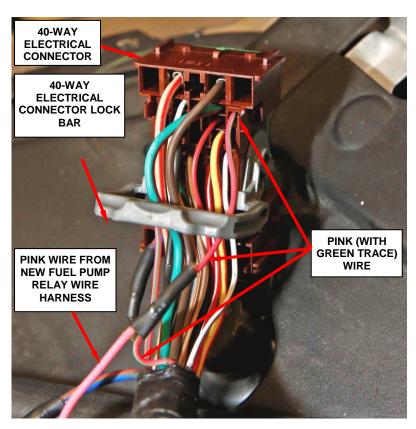


Figure 42 – Install Pink (with Green Trace) Wire Terminal into the same cavity on the 40-Way Connector from which it was removed



Figure 43 - Install Back Cover and Tie Strap

35. Route the **NEW** Fuel Pump Relay wiring harness along the main TIPM harness and secure the **NEW** harness using tie straps as shown in (Figure 44).

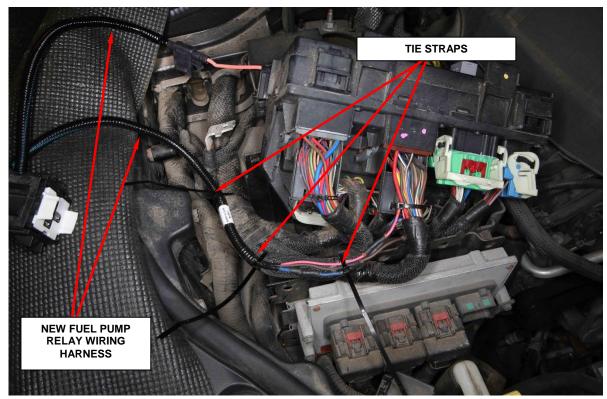


Figure 44 - New Fuel Pump Relay Harness

- 36. Cut off the excess tie strap material.
- 37. Align and install the TIPM in housing assuring all four of the release tabs are fully locked (Figure 45).



Figure 45 - TIPM Tabs

38. Attached the **NEW** external fuel pump relay bracket to the existing hole on the PCM mounting bracket and tighten the nut and bolt to 6N⋅m (53in. lbs.) (Figure 46).

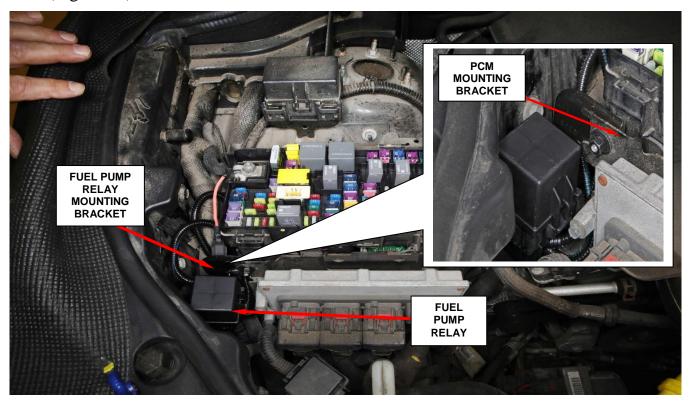


Figure 46 - Mount New External Relay to TIPM bracket

- 40. Connect the original B+ cable terminal to the TIPM B+ stud (Figure 47).
- 41. Connect the wire eyelet on the orange wire of the new fuel pump relay wire harness to the TIPM B+ stud (Figure 47).
- 42. Install the B+ cable terminal retaining nut. Tighten the nut to 14 ft. lbs. (19 N⋅m) (Figure 47).

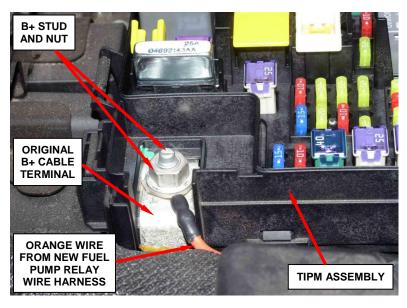


Figure 47 – B+ Electrical Connection

43. Push down on all the relays and fuses in the TIPM to ensure that they are all fully engaged.

CAUTION: Be sure that the new fuel pump relay wire harness does not contact any sharp edges that may damage the new fuel pump relay wire harness.



44. Carefully install the TIPM access cover (Figure 48).

Figure 48 - Install TIPM Cover

- 45. Connect the negative battery cable to the negative battery terminal on the battery and close the battery access cover.
- 46. Return the passenger seat to its original location.
- 47. Return the vehicle to the customer.

#### **Completion Reporting and Reimbursement**

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use <u>one</u> of the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Install external fuel pump relay and wire harness	s 08-V6-21-82	0.7 hours
Replace fuel pump relay and wire harness (If R09 or P54 Previously Performed)	08-V6-21-83	0.5 hours

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

#### **Dealer Notification**

To view this notification on DealerCONNECT, select "Global Recall System" on the Service tab, then click on the description of this notification.

## **Owner Notification and Service Scheduling**

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

# Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an <u>updated</u> VIN list of <u>their incomplete</u> vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers <u>must</u> perform this repair on all unsold vehicles <u>before</u> retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

#### **Additional Information**

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations FCA US LLC This notice applies to your vehicle,

#### V62/NHTSA 19V-813

#### **LOGO**

#### **VEHICLE PICTURE**

#### YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION
  Call your authorized Chrysler /
  Dodge / Jeep<sub>®</sub> / RAM Dealership
- 2. Call the FCA Recall Assistance Center at 1-800-853-1403. An agent can confirm part availability and help schedule an appointment
- 3. Visit recalls.mopar.com, scan the QR code below, or download the Mopar Owner's Companion App.

**QR** Code

Get access to recall notifications, locate your nearest dealer, and more through this website or Mopar Owner's Companion App. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

#### **DEALERSHIP INSTRUCTIONS**

Please reference Safety Recall V62.

# **IMPORTANT SAFETY RECALL**

#### **Fuel Pump Relay**

Dear [Name],

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

FCA US has decided that a defect, which relates to motor vehicle safety, exists in certain [2011 – 2013 (WD) Dodge Durango, and 2011 – 2013 (WK) Jeep Grand Cherokee] vehicles.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

#### WHY DOES MY VEHICLE NEED REPAIRS?

Our records indicate that your vehicle [1] was included in previous Safety Recall P54 (NHTSA 14V-530) or Safety Recall R09 (NHTSA 15V-115). The remedy for the previous recalls was to replace the fuel pump relay. If you had either of these recalls completed, the installed remedy relay is susceptible to silicon contamination on the relay contacts, which can cause the relay to fail. A fuel pump relay failure can result in a no-start condition or an engine stall condition if the vehicle is running. A vehicle engine stall while driving can cause a vehicle crash without prior warning.

#### HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA will repair your vehicle <sup>[2]</sup> free of charge (parts and labor). To do this, your dealer will replace the affected fuel pump relay and related wire harness. For vehicles that have not been serviced for recall P54 or R09, a new externally mounted relay and wire harness will be installed to bypass the fuel pump relay that is internal to the totally integrated power module. For vehicles that have already been serviced for recall P54 or R09, the existing externally mounted fuel pump relay and wire harness will be replaced with a new relay and wire harness. The estimated repair time is about one hour. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit, which require more time. Your time is important to us, so we recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

#### TO SCHEDULE YOUR <u>FREE</u> REPAIR, CALL YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY

#### WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

If you have already experienced this specific condition and have paid to have it repaired, you may visit <a href="www.fcarecallreimbursement.com">www.fcarecallreimbursement.com</a> to submit your reimbursement request online. [3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

We apologize for any inconvenience, but are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Assistance/Field Operations FCA US LLC



Mr. Mrs. Customer 1234 Main Street Hometown, MI 48371

<sup>[1]</sup> If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

<sup>[2]</sup> If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to safercar.gov.

<sup>[3]</sup> You can also mail in your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement.